

Task 2.3.1R

**Los Angeles-to-San Diego-
via-
Inland Empire Corridor
High-Speed Train Alignments/Stations
Screening Evaluation Executive Summary**

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TABLE OF CONTENTS

S.0 SUMMARY.....	1
S.1 INTRODUCTION AND PURPOSE	1
S.2 PARAMETERS AND ASSUMPTIONS.....	1
S.3 EVALUATION METHODOLOGY.....	1
S.4 ALIGNMENT AND STATION DEFINITION.....	2
S.5 ALIGNMENT AND STATION EVALUATION.....	6
S.6 ALIGNMENTS.....	8
S.7 STATIONS.....	12
S.8 SUMMARY	12

LIST OF FIGURES

S.4-1 LOS ANGELES TO SAN DIEGO ALIGNMENT OPTIONS	3
S.4-2 LOS ANGELES TO MARCH ARB SEGMENT ALIGNMENTS	4
S.4-3 MARCH ARB TO MIRA MESA SEGMENT ALIGNMENTS.....	5
S.4-4 MIRA MESA TO SAN DIEGO SEGMENT ALIGNMENTS.....	7

LIST OF TABLES

S.3-1 HIGH-SPEED RAIL ALIGNMENT/STATION EVALUATION OBJECTIVES AND CRITERIA	1
S.8-1 LOS ANGELES-TO-SAN DIEGO-VIA-INLAND EMPIRE REGION – HIGH-SPEED TRAIN ALIGNMENT ATTAINMENT OF OBJECTIVES.....	14

ACRONYMS

ACE	Alameda Corridor East Construction Authority
AMBAG	Association of Monterey Bay Area Governments
Authority	California High-Speed Rail Authority
BNSF	Burlington Northern Santa Fe
CEQA	California Environmental Quality Act
CETAP	Community and Environmental Transportation Acceptability Process
COG	Council of Governments
CRA	Community Redevelopment Agency
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMI	electromagnetic interference
FAA	Federal Aviation Administration
FRA	Federal Railroad Administration
IEEP	Inland Empire Economic Partnership
LAWA	Los Angeles World Airports
maglev	magnetic levitation
MAP	millions of air passengers
MCAS	Marine Corps Air Station
MOS	Minimum Operating Segment
MTA	Metropolitan Transportation Authority (Los Angeles County)
VHS	Very High Speed

S.0 SUMMARY

S.1 INTRODUCTION AND PURPOSE

The California High-Speed Rail Authority (Authority) has initiated a formal environmental clearance process through the preparation of a state program-level Environmental Impact Report (EIR) and a federal Tier I Environmental Impact Statement (EIS) or Program EIR/EIS.

The purpose of the Screening Evaluation is to consider all reasonable alignment and station options at a consistent level of analysis and focus the Program environmental analysis on the most viable of these alignment and station options. The initial set of alignments and station locations was identified by the Authority's Business Plan, through meetings with elected officials, and through the environmental scoping process. The results of the screening process and information differentiating the alignment and station options are documented herein for the Los Angeles-to-San Diego-via-Inland Empire Corridor. Based on recommendations by the Authority staff, the Authority will identify alignments and stations to be carried forward for more detailed analysis in the Program EIR/EIS.

Chapter 1 of the Screening Evaluation provides additional background on the Program and describes the proposed statewide high-speed train system and the Los Angeles-to-San Diego-via-Inland Empire Corridor.

S.2 PARAMETERS AND ASSUMPTIONS

High-speed train alignment and station options were developed through the consistent application of system, engineering, and operating parameters as described in Task 1.5.2. The design, cost, and performance parameters used in developing the alignment and station options are based on two technology groups, classified by speed. The Very High Speed (VHS) group includes trains capable of maximum operating speeds near 220 miles per hour (mph) (350 kilometers per hour [km/h]) utilizing steel-wheel-on-steel-rail technology. The magnetic levitation (maglev) group utilizes magnetic forces to lift and propel the train along a guideway and is designed for maximum operating speeds above that of VHS technology. High-speed train engineering design parameters are documented in Task 1.5.2 and are summarized in Chapter 2 of the Screening Evaluation.

No regional variances to the engineering parameters were introduced in the Los Angeles-to-San Diego-via-Inland Empire region.

S.3 EVALUATION METHODOLOGY

As listed in Table S.3-1, a number of key evaluation objectives and criteria were developed based on previous studies with enhancements that reflect the Authority's high-speed train performance goals and criteria described in Task 1.5.2. These objectives and criteria have been applied in the screening of the high-speed train alignment and station options developed in Chapter 3. Each of the evaluation criteria is discussed in Chapter 4 of the Screening Evaluation.

Table S.3-1
High-Speed Rail Alignment/Station Evaluation Objectives and Criteria

Objective	Criteria
Maximize Ridership/Revenue Potential	<ul style="list-style-type: none"> Travel Time Length Population/Employment Catchment
Maximize Connectivity and Accessibility	<ul style="list-style-type: none"> Intermodal Connections
Minimize Operating and Capital Costs	<ul style="list-style-type: none"> Length Operational Issues Construction Issues Capital Cost

Table S.3-1
High-Speed Rail Alignment/Station Evaluation Objectives and Criteria

Objective	Criteria
Maximize Compatibility with Existing and Planned Development	<ul style="list-style-type: none"> ▪ Right-of-Way Issues/Cost ▪ Land Use Compatibility and Conflicts ▪ Visual Quality Impacts
Minimize Impacts to Natural Resources	<ul style="list-style-type: none"> ▪ Water Resources ▪ Floodplain Impacts ▪ Threatened & Endangered Species Impacts
Minimize Impacts to Social and Economic Resources	<ul style="list-style-type: none"> ▪ Environmental Justice Impacts (Demographics) ▪ Farmland Impacts
Minimize Impacts to Cultural Resources	<ul style="list-style-type: none"> ▪ Cultural Resources Impacts ▪ Parks & Recreation/Wildlife Refuge Impacts
Maximize Avoidance of Areas with Geologic and Soils Constraints	<ul style="list-style-type: none"> ▪ Soils/Slope Constraints ▪ Seismic Constraints
Maximize Avoidance of Areas with Potential Hazardous Materials	<ul style="list-style-type: none"> ▪ Hazardous Materials/Waste Constraints

No variances from the engineering evaluation criteria in Task 1.5.2 were introduced in the Los Angeles-to-San Diego-via-Inland Empire Corridor.

For the environmental evaluation, variances to the evaluation criteria were introduced for impacts to visual quality, water resources, and parks and recreation/wildlife refuge. The variances were introduced to supplement the GIS database and to obtain additional subjective public input on the visual impacts of trains and structures.

S.4 ALIGNMENT AND STATION DEFINITION

Chapter 3 of the Screening Evaluation describes each alternative alignment and potential station locations, including alignments and stations carried over from the previous work of the Authority as well as new alignments and stations that have been added during the current phase of work. Alignments were divided into segments with segment names and numbers assigned to remain consistent with the general pattern-traveling north to south and west to east. See Figure S.4-1 for a overview of the alignments throughout the study corridor.

The following is a comprehensive list of the alignments and stations that have been carried forward through this screening process. These are the focus of the analysis that has been undertaken to evaluate the impact of the proposed project on various environmental, engineering, and planning factors described further in Chapter 4 of the Screening Evaluation.

Los Angeles Union Station-to-March Air Reserve Base (ARB) Segment Alignments (See Figure S.4-2)

- 1.a Union Station to March ARB via the UP/Colton Rail Corridor
- 1.b Union Station to March ARB via the UP/Metrolink Rail Corridor
- 1.c Union Station to March ARB via the I-10 Freeway Corridor
- 1.d Union Station to March ARB via the SR 60 Freeway Corridor
- 1.e Union Station to March ARB via the BNSF/SR 91 Rail/Freeway Corridor
- 1.f Union Station to March ARB via the UP Colton/BNSF Rail Corridor to San Bernardino
- 1.g Union Station to March ARB via the UP Riverside and UP Colton Rail Corridors (the Business Plan Alignment)

March ARB-to-Mira Mesa Segment Alignments (See Figure S.4-3)

- 2.a I-215/I-15 Freeway Corridor
- 2.b I-215/I-15 Freeway Corridor alignment that maximizes tunnels to reduce travel times

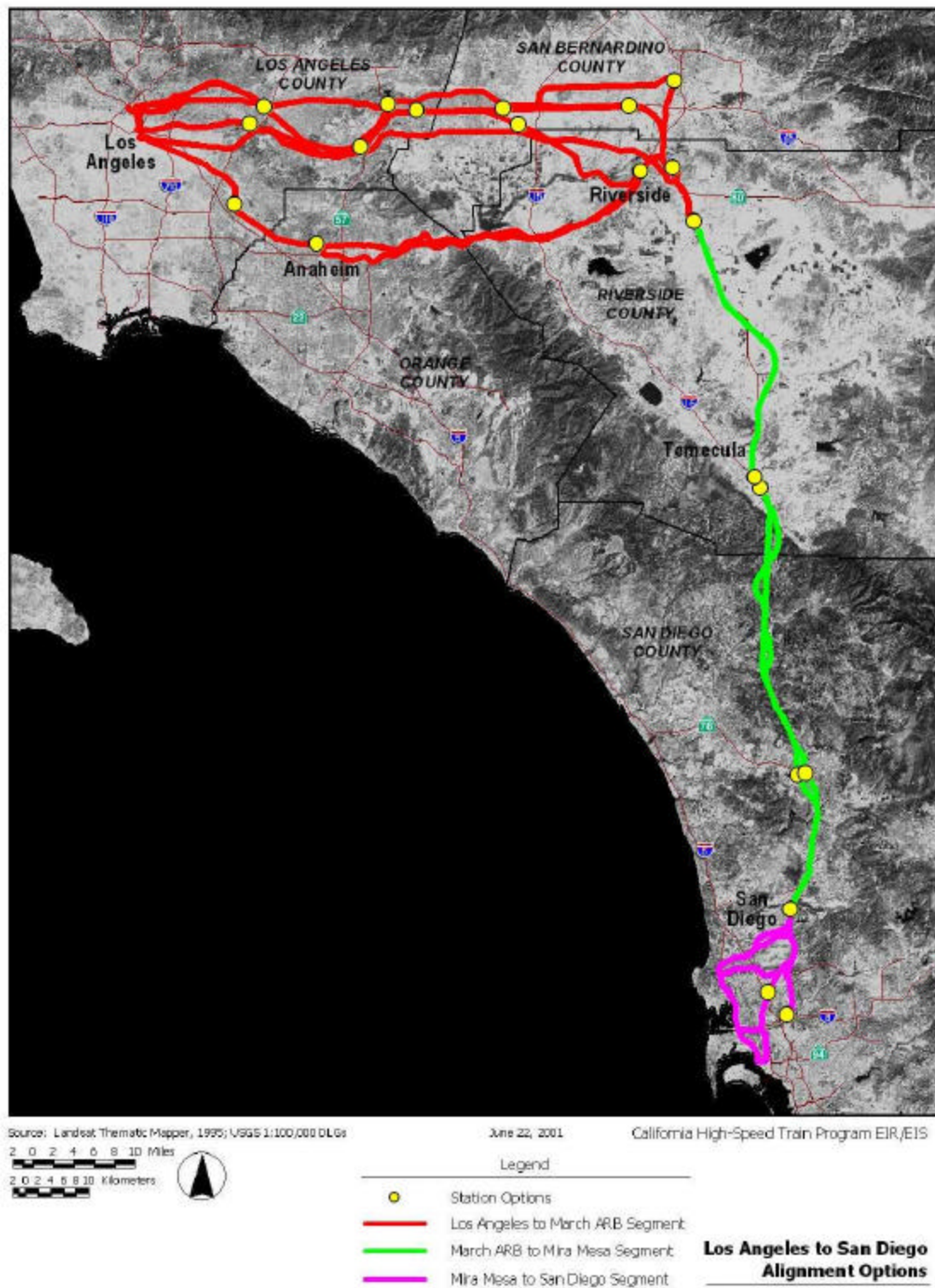


Figure S.4-1

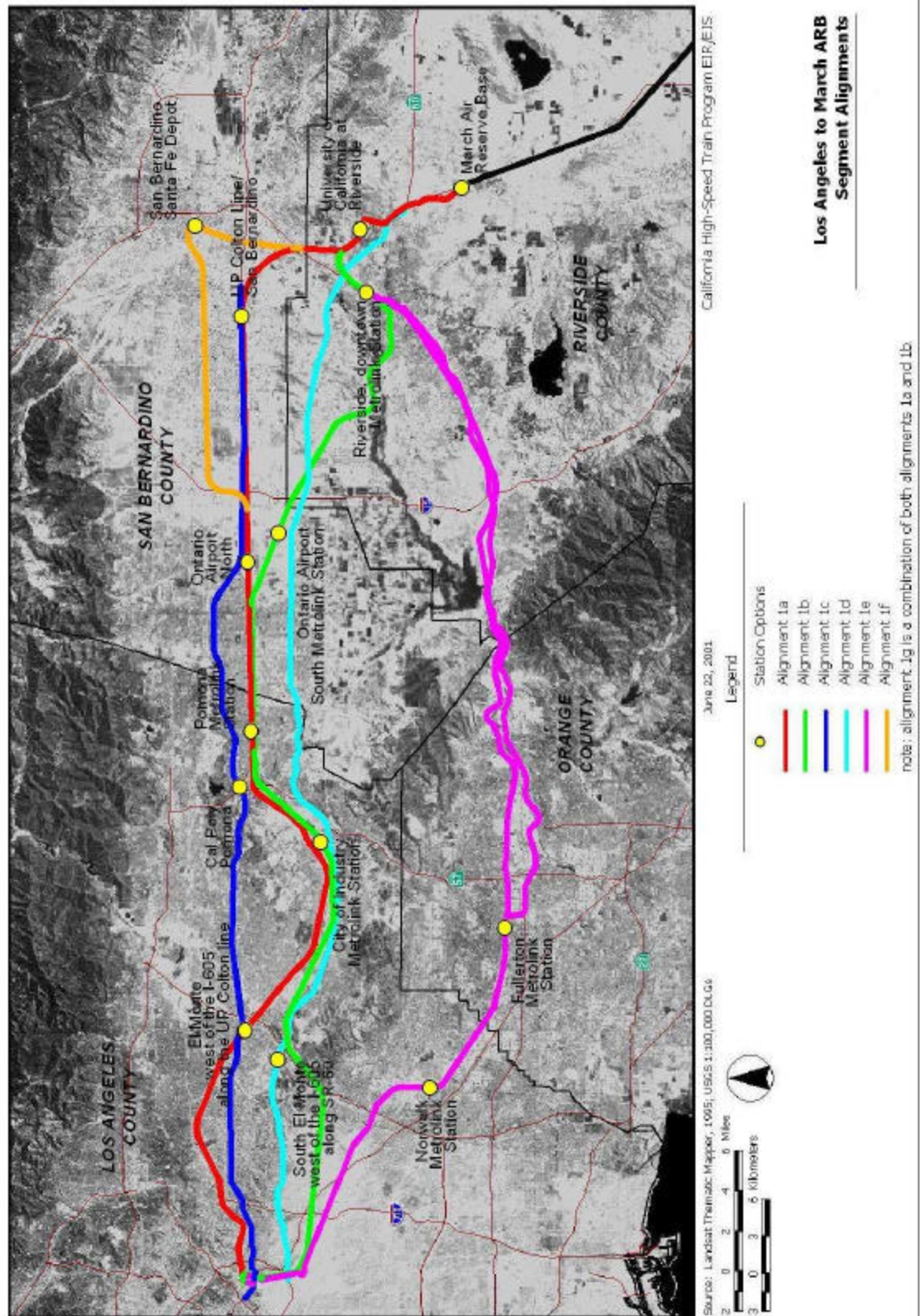


Figure S.4-2

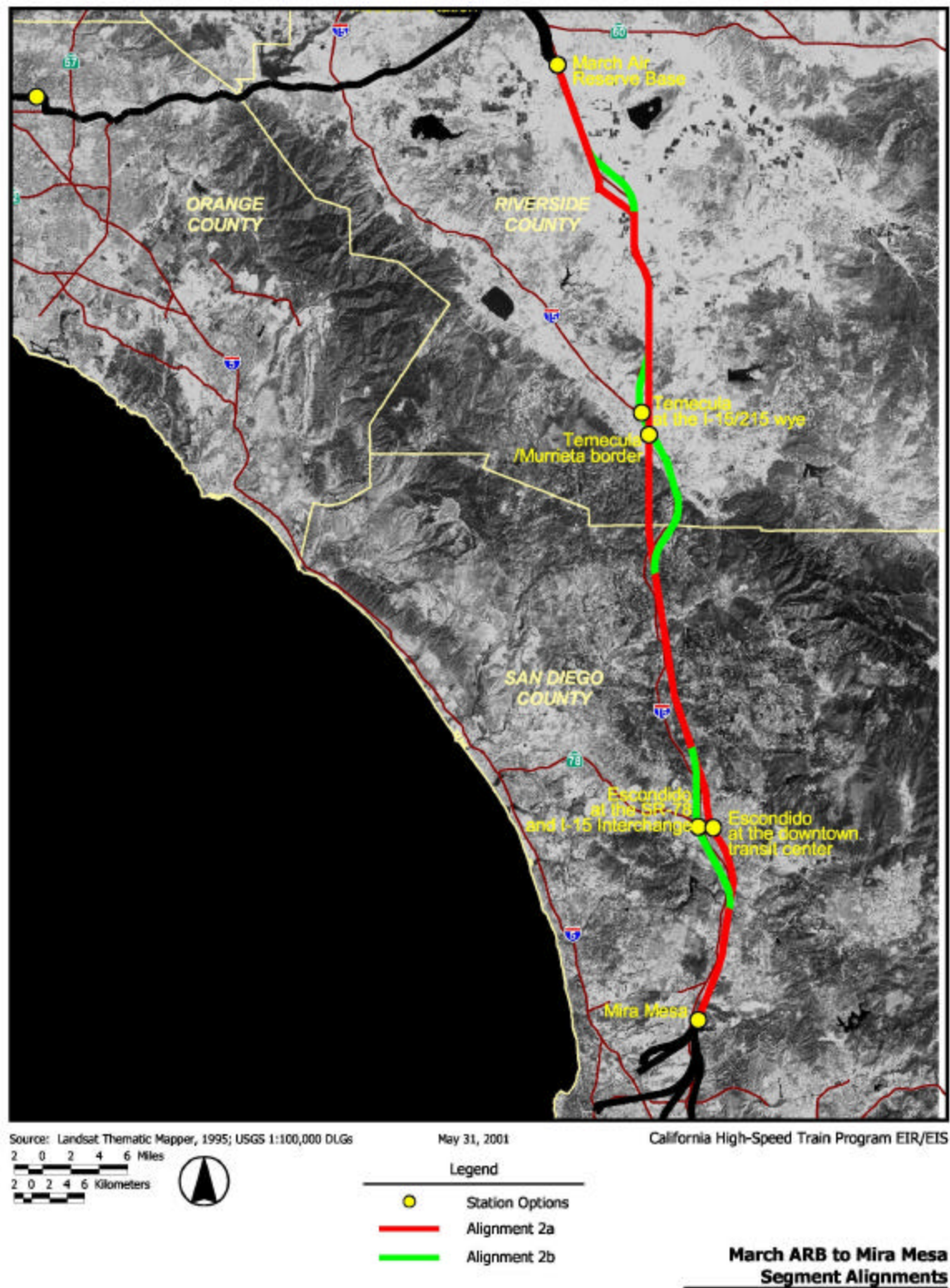


Figure S.4-3

Mira Mesa-to-San Diego Segment Alignments (See Figure S.4-4)

- 3.a From I-15 through Carroll Canyon/Miramar Road to San Diego via the Los Angeles to San Diego (LOSSAN) Corridor
- 3.b I-15 Freeway to Miramar Road to San Diego via the LOSSAN Corridor
- 3.c I-15 Freeway to SR 52 to San Diego via the LOSSAN Corridor
- 3.d From I-15 to SR 163 to San Diego via the LOSSAN Corridor
- 3.e I-15 Freeway to Qualcomm Stadium in East Mission Valley
- 3.f From I-15 to SR 163 to I-8 to San Diego via the LOSSAN Corridor

Los Angeles Union Station-to-March ARB Segment Stations (See Figure S.4-2)

El Monte West of the I-605 along the UP Colton Line
South El Monte West of the I-605 along SR 60
Norwalk Metrolink Station
Fullerton Metrolink Station
City of Industry Metrolink Station
California Polytechnic State University in Pomona
Pomona Metrolink Station
Ontario Airport North
Ontario Airport South Metrolink Station
Riverside, Downtown Metrolink Station
University of California at Riverside
Colton Line Station
San Bernardino Santa Fe Depot
March Air Reserve Base

March ARB-to-Mira Mesa Segment Stations (See Figure S.4-3)

Temecula at the I-15/215 Wye
Temecula/Murrieta border
Escondido at the SR 78 and I-15 Interchange
Escondido at the downtown transit center
Mira Mesa

Mira Mesa to San Diego Segment Stations (See Figure S.4-4)

Kearny Mesa across from Montgomery Field
Qualcomm Stadium in East Mission Valley

S.5 ALIGNMENT AND STATION EVALUATION

Alignment and station options were analyzed according to the methodologies described in Task 1.5.2, as described in Chapter 2 of the Screening Evaluation. The alignments and stations were ranked according to the relative potential of their impacts under each environmental and engineering criterion. Chapter 4 describes the results of the analysis and ranking process for all engineering and environmental criteria. Chapter 4 includes a comprehensive table of the results of the analyses and the relative rankings assigned to each alignment segment and each station location.

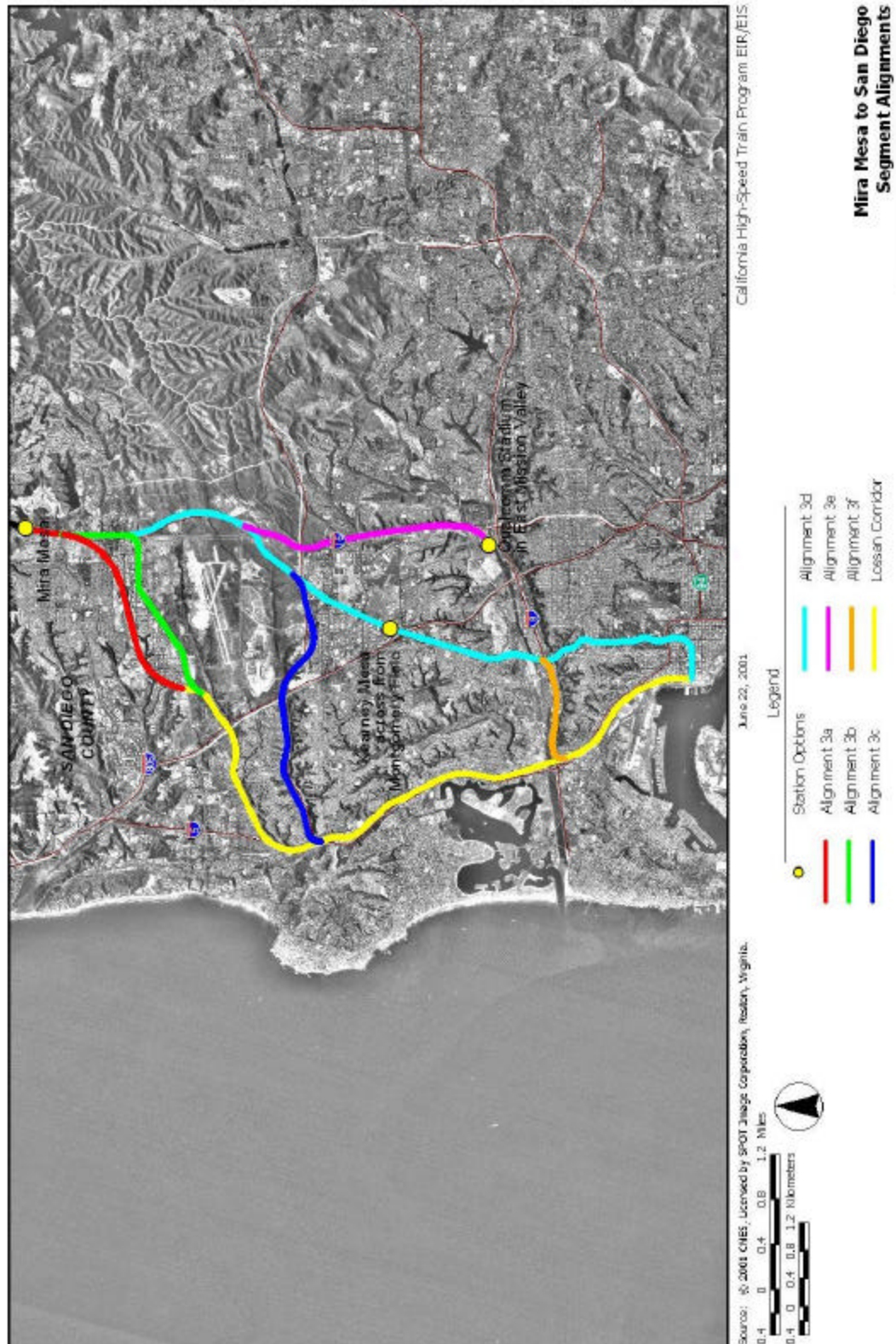


Figure S.4-4

Three general areas of inquiry were pursued: engineering, planning, and environmental impacts. The narrative describes the range of findings for each key parameter evaluated in each analysis category and points out unique situations or special concerns as they arise. Both the alternative segment alignments and alternative station locations are discussed, followed by a summary table (Table S.4-1) that lists all of the alignments and stations by segment. This table provides the key issues and quantitative ranking for each alignment or station based on the cumulative score of each alignment or station taken from the detailed technical analysis tables found in Chapter 4 of this report. The rankings are based on a numerical scale of 1 to 5 with 1 indicating the greatest impact or highest constraint and 5 indicating the least impact or lowest constraint. The rankings presented in this summary are simple averages, and are not weighted to account for any differentiation among the relative importance of one issue or analysis category versus another.

S.6 ALIGNMENTS

S.6.1 LOS ANGELES UNION STATION TO MARCH ARB SEGMENT

A. Engineering

Grade

Grades in this segment do not differ widely among the alternatives. The terrain is generally level and all of the alternatives perform well in keeping below the maximum allowable 3.5 percent grade.

Cost

The capital cost to build each of the alternative alignments evaluated in this segment ranges between \$3.3 (Alignment 1.a) and \$4.1 billion (Alignment 1.d). The costs are projected based on the extensive need for aerial or trench construction methods in this highly urbanized area.

Length

The length of the alternative alignments in this segment ranges between 62.9 miles (101.2 kilometers) for Alignment 1.d to 73.6 miles (118.4 kilometers) for Alignment 1.f. Generally, the shorter alignments are found along the freeway corridors evaluated. Alignment 1.f via the UP Colton line to San Bernardino is particularly long, due to the need to extend further north to accomplish a reasonable radius for turning the high-speed rail line southward at the Santa Fe Depot station in San Bernardino.

Time

Travel times in this segment range from 28.5 minutes for Alignment 1.a to 52.2 minutes for Alignment 1.e. Existing railroad corridors generally performed better than freeway or mixed rail/freeway corridors since they tend to be straighter and more direct allowing for greater speeds.

Construction Techniques

Almost all of the alignments in this segment would be constructed using an aerial or trench configuration. The heavily urbanized nature of the surrounding communities prevents any extensive use of at-grade construction methods except for portions of the BNSF (Alignment 1.e) and UP Colton (Alignments 1.a, 1.g) alignments where they are adjacent to freeways and have minimal intersections with crossing roads and other transportation facilities. Most likely, all of the freeway alignments would require the exclusive use of aerial construction.

Freeway Alignments 1.c and 1.d would require relocating and maintaining freeway access and capacity during construction.

Rights of Way Issues

Given the heavily built up nature of the entire Los Angeles basin, available right-of-way is extremely precious. It is particularly difficult to find available space along the freeway alignments since most of the available right-of-way has been used or is about to be used for upcoming transportation projects such as high-occupancy vehicle (HOV) lanes and additional interchange improvements. Railroad corridors are also tightly configured, but they are typically abutting less sensitive industrial and commercial uses that are more compatible with the high-speed rail system.

B. PLANNING

Land Use Compatibility

Land uses in the area include almost all possible variations of residential, commercial, and industrial uses. In general, the rail corridors have existing uses that are more compatible with high-speed rail than freeway corridors have. Therefore, Alignments 1.a, 1.b, 1.f, and 1.g fared better on this criterion than did Alignments 1.c, 1.d, and 1.e. Alignments 1.c, 1.d, and 1.e had a higher incidence of land use conflicts such as local and regional parks, schools, courthouses, hospitals, universities, and cemeteries.

Connectivity

The various alignments traverse existing transportation corridors so that connectivity to major population centers is generally good. The alignments with the highest performance in this category are those that have good intermodal connections at major transportation hubs in the region, such as an existing rail station or bus transfer station. Alignments 1.a, 1.b, 1.e, 1.f, and 1.g scored better overall in this category than did Alignments 1.c and 1.d, the purely freeway alignments.

Environmental Justice

A high incidence of minority population concentrations was found along Alignments 1.a, 1.c, and 1.d.

C. Environmental

Seismic Constraints

Three major faults pass through Alignment 1.e: the San Jacinto Fault, the Chino Fault, and the Whittier-Elsinore Fault.

S.6.2 March ARB to Mira Mesa Segment

A. ENGINEERING

Grade

Grades in this segment significantly exceed 3.5 percent and can pose a problem for the maintenance of speed and travel times. Two alternative alignments were developed; Alignment 2.a, which maximized the tunnel sections to provide for a straighter and flatter path for the high-speed train, and Alignment 2.b that more closely followed the existing I-15 freeway alignment. The need to provide a third bore tunnel and seismic chambers in the tunnel segments also increases the costs of the maximized tunneling alignment, (2.a).

Cost

Capital construction costs for each alignment are estimated to be \$3.769 billion for Alignment 2.a and \$2.814 billion for Alignment 2.b. The difference in cost can be attributed to the need for more tunneling along Alignment 2.a as well as the need for special portal treatments, seismic chambers and a third bore tunnel in some tunnel sections.

Length

Alignment 2.a is 70.3 miles (113.1 kilometers) long while Alignment 2.b is 71.8 miles (115.5 kilometers) long. The difference again is attributed to the greater use of tunnels in Alignment 2.a allowing for a straighter and slightly shorter path.

Time

Travel times for the two alignments in this segment are almost identical at 20.4 minutes for Alignment 2.a and 20.8 minutes for Alignment 2.b.

Construction Techniques

Both alignments will rely on the heavy use of tunneling in this segment. This will be coupled with aerial structures and bridges across major rivers and gorges while at-grade portions will be possible in the northern reaches of the alignments between Riverside and Temecula.

Right-of-Way Issues

Both alignments remain relatively close to the freeway alignment in this segment and pass through mostly undeveloped terrain making the right-of-way issues here less significant than in the northern and southern segments.

B. PLANNING

Land Use Compatibility

Alignment 2.a crosses more than 6 miles (9.7 kilometers) of existing residential areas affecting over 250 homes. It also crosses a river park and Post Office and would likely divide communities in northern San Diego County. Alignment 2.b crosses less residential area (2.5 miles, 4.0 kilometers), but it also would serve to divide communities through the area.

Connectivity

Connectivity for both alignments is roughly comparable, except that Alignment 2.a has the advantage of a station stop at the existing Escondido Transit Facility.

C. ENVIRONMENTAL

Parks and Recreation/Wildlife Refuge Impacts

Alignment 2.b would run through the Rancho Acacias Park in Murrieta, through 1 mile (1.6 kilometers) of the Kit Carson Park in Escondido, and through about 3 miles (4.8 kilometers) of the Santa Margarita Ecological Reserve.

S.6.3 Mira Mesa to San Diego Segment

A. ENGINEERING

Grade

The northern end of this segment continues to require some tunneling and aerial structure to negotiate the hilly terrain. None of the six alternative alignments stands out as having a particularly straighter travel path in this segment although some alignments (3.a, 3.b, 3.c, and 3.f) connect westward to the LOSSAN corridor.

Cost

The highest cost alignment in this segment is Alignment 3.c at \$1.4 billion while the lowest cost alignment is 3.e at \$0.825 billion. There are significant differences in the overall lengths of each of the alignments in this segment that affect the cost of each alternative.

Length

The shortest alignment in this segment is Alignment 3.e at 10.1 miles (16.2 kilometers) because it stops early at Qualcomm Stadium. The longest alignment is Alignment 3.c, the I-15 to the LOSSAN Corridor via SR-52, at 20.4 miles (32.8 kilometers).

Time

The shortest travel time in this segment is Alignment 3.e to Qualcomm Stadium at 4.2 minutes while the longest travel time is Alignment 3.a via Carroll Canyon at 14.1 minutes.

Construction Techniques

All of the alternative alignments in this segment would require aerial construction along most of their lengths. Alignment 3.d stands out because it would require significant tunneling under Balboa Park to arrive at downtown San Diego.

Rights-of-Way Issues

As was found in the segment that goes from Los Angeles to March ARB, the areas through which almost all of the alignments pass are heavily built up and expected to continue to grow over the coming decades. An exception to this is Alignment 3.a that passes through relatively undeveloped areas.

B. PLANNING

Land Use Compatibility

In addition to crossing Marine Corps Air Station (MCAS) Miramar, a high school, and residential areas as several other Segment 3 alignments do, Alignment 3.c also crosses Marion Bear Park along SR 52, where approval of nonpark uses requires a 2/3 vote of the people. Alignment 3.d crosses Balboa Park, which similarly must follow the above voting rule.

Connectivity

Connectivity to major population centers in this segment is best served by Alignment 3.e to Qualcomm Stadium due to the existing transit hub and the San Diego Trolley station in place at that location.

C. ENVIRONMENTAL

Wetlands

Most of the undeveloped open spaces on or adjacent to the alignment supports vernal pools and/or coastal sage scrub habitats, or high-value riparian habitats. The vernal pools at MCAS Miramar alone support at least five federally listed species. Alignments 3.b, 3.c, 3.d, 3.e, and 3.f must traverse vernal the pool basin habitat or the adjacent heavily urbanized areas.

Threatened and Endangered Species Impacts

The vernal pools at MCAS Miramar alone support at least five federally listed species including: San Diego button-celery, California Orcutt grass, San Diego mesa mint, Riverside fairy shrimp, and San Diego fairy shrimp. Coastal sage scrub supports the state- and

federally listed California gnatcatcher. Impacts may be expected for Alignments 3.b, 3.c, 3.d, 3.e, and 3.f in this segment.

S.7 STATIONS

S.7.1 Engineering

Since many of the alignments will be running along aerial structures, stations would also be developed in an aerial configuration in most places. A typical cost for an urban station (typically aerial) has been estimated at \$55 million, most of the stations in this region fall into this category. A suburban station (possibly aerial also but requiring less ancillary development) would cost \$27.5 million. Six such station locations were identified: Ontario South, Ontario North, Cal Poly Pomona, City of Industry, March ARB, and the Temecula-Murrieta Border. A rural station would require even fewer amenities. Only one potentially rural station site was identified in this region, Murrieta at the I-15 and I-215 Interchange. Only one terminal station, costing \$110 million, was identified at the Qualcomm Stadium location.

S.7.2 Planning

A. POPULATION CATCHMENT

Both the Temecula-Murrieta border and the Murrieta I-15/I-215 stations fall within a moderately populated area but one that is experiencing significant growth.

B. INTERMODAL CONNECTIONS

The fewest intermodal connections exist at both of the Temecula/Murrieta stations, the Kearny Mesa station, and the City of Colton station. The most connections are found at existing transit and transportation stations and centers such as the downtown Pomona station, the downtown Riverside station, the Santa Fe Depot station in San Bernardino, the Fullerton Transit Center, the Escondido Transit Facility and Qualcomm Stadium.

C. LAND USE COMPATIBILITY

Conflicts would occur between existing residential populations at South El Monte and the El Monte I-10 stations. A police station is located at the site of the Fullerton transportation Center. Finally, park and office land use and an old town smaller scale development at the downtown Pomona station would pose land use conflicts at this location.

S.7.3 Environmental

A. ENVIRONMENTAL JUSTICE

A high incidence of minority population concentrations was found at the Norwalk Metrolink station, the South El Monte station west of I-605, the El Monte stations along I-10, and along the UP Colton line west of the I-605, the Ontario South station, the downtown Pomona Metrolink station, the City of Industry Metrolink station, and the downtown Riverside station.

B. VISUAL IMPACTS

The downtown Pomona Metrolink station is in a small-scale setting with historical significance, so that a high-speed train station would have low visual compatibility.

S.8 SUMMARY

Based on the analyses performed to date, the alternative alignments and station options for this regional segment passed through the screening evaluation as viable options for further study. Refer to Table S.4-1 to see the relative ranking of any particular alignment or station.

Key constraints that generally affect all the alignment corridors are:

- The heavily built-up urban context of the Los Angeles and San Diego areas;
- The lack of available right-of-way, particularly in the freeway corridors;
- The reliance on grade separated facilities throughout the Los Angeles Basin and through much of the urban San Diego area;
- The environmental issues for those alignments passing through environmentally sensitive lands in the March ARB to Mira Mesa and the Mira Mesa to San Diego segments.
- The railroad operational issues regarding passenger vs. freight traffic affecting the availability of rail corridors for future development.

Key constraints that generally affect the station options are:

- The need for significant parcels of land to provide ancillary station services particularly at key urban station locations;
- The scale of the stations relative to the smaller scale of existing development at some locations such as Pomona and Riverside;
- The lack of good intermodal connections at some of the more remote station option locations;
- The historic and cultural issues associated with locating stations within existing downtown locations.

Table S.8-1
Los Angeles-to-San Diego-via-Inland Empire Region – High-Speed Train Alignment Attainment of Objectives
Los Angeles Union Station to March Air Reserve Base, Segment 1

Objective	1a via UP Colton	1b via UP Riverside	1c via I-10	1d via SR 60	1e via BNSF/ SR 91	1f via UP Colton/San Bernardino	1g via UP Riverside/ UPColton
Maximize Ridership/Revenue Potential	5	3	4	5	2	3	4
Maximize Connectivity and Accessibility	3	3	2	2	2	3	3
Minimize Operating and Capital Costs	4	4	2	2	2	3	4
Maximize Compatibility with Existing and Planned Development	3	4	4	3	2	3	3
Minimize Impacts to Natural Resources	4	4	4	3	3	4	4
Minimize Impacts to Social and Economic Resources	4	4	4	5	5	4	4
Minimize Impacts to Cultural Resources	3	2	3	4	2	4	2
Maximize Avoidance of Areas with Geologic and Soils Constraints	2	2	2	3	2	4	2
Maximize Avoidance of Areas with Potential Hazardous Materials	4	3	5	4	3	3	3

1 2 3 4 5

Least Favorable

Most Favorable

Table S.8-1
Los Angeles-to-San Diego-via-Inland Empire Region – High-Speed Train Alignment Attainment of Objectives
March Air Reserve Base to Mira Mesa, Segment 2

Objective	Alignment 2a Maximize Tunneling	Alignment 2b Minimize Tunneling
Maximize Ridership/Revenue Potential	5	5
Maximize Connectivity and Accessibility	4	4
Minimize Operating and Capital Costs	2	4
Maximize Compatibility with Existing and Planned Development	3	3
Minimize Impacts to Natural Resources	4	3
Minimize Impacts to Social and Economic Resources	4	4
Minimize Impacts to Cultural Resources	4	3
Maximize Avoidance of Areas with Geologic and Soils Constraints	3	3
Maximize Avoidance of Areas with Potential Hazardous Materials	5	5

1 2 3 4 5

Least Favorable

Most Favorable

Table S.8-1
Los Angeles-to-San Diego-via-Inland Empire Region – High-Speed Train Alignment Attainment of Objectives
Mira Mesa to San Diego, Segment 3

Objective	3a Carroll Canyon	3b Miramar Road	3c SR-52	3d I-15/SR-163	3e I-15 to Qualcomm	3f I-15/SR-163/I-8
Maximize Ridership/Revenue Potential	2	3	3	5	5	4
Maximize Connectivity and Accessibility	3	4	4	4	4	3
Minimize Operating and Capital Costs	2	2	2	4	5	3
Maximize Compatibility with Existing and Planned Development	3	3	2	2	3	3
Minimize Impacts to Natural Resources	3	2	2	2	2	2
Minimize Impacts to Social and Economic Resources	5	5	5	4	5	5
Minimize Impacts to Cultural Resources	5	5	5	2	5	5
Maximize Avoidance of Areas with Geologic and Soils Constraints	4	4	4	4	4	4
Maximize Avoidance of Areas with Potential Hazardous Materials	5	5	5	5	5	5

1 2 3 4 5

Least Favorable

Most Favorable

Table S.8-1
Los Angeles-to-San Diego-via-Inland Empire Region – High-Speed Train Station Attainment of Objectives

Objective	West of the I-605 in El Monte UP Colton	West of the I-605 in El Monte , I-10	West of the I-605 in South El Monte	Norwalk Metrolink Station	Fullerton Transportation Center	City of Industry, Metrolink Station
Maximize Ridership/Revenue Potential	4	4	5	5	5	5
Maximize Connectivity and Accessibility	3	3	3	5	5	4
Minimize Operating and Capital Costs	N/A	N/A	N/A	N/A	N/A	N/A
Maximize Compatibility with Existing and Planned Development	5	4	4	4	4	4
Minimize Impacts to Natural Resources	5	5	4	5	5	5
Minimize Impacts to Social and Economic Resources	4	3	3	5	5	3
Minimize Impacts to Cultural Resources	5	5	5	5	5	5
Maximize Avoidance of Areas with Geologic and Soils Constraints	4	4	4	4	4	4
Maximize Avoidance of Areas with Potential Hazardous Materials	5	5	5	5	5	5

1 2 3 4 5

Least Favorable

Most Favorable

Table S.8-1
Los Angeles-to-San Diego-via-Inland Empire Region – High-Speed Train Station Attainment of Objectives

Objective	Pomona Metrolink Station	Cal Poly Pomona	Ontario Airport, Northside	Ontario Airport South, Metrolink Station	Colton Station	Santa Fe Depot, San Bernardino
Maximize Ridership/Revenue Potential	4	4	3	3	4	5
Maximize Connectivity and Accessibility	5	2	4	3	1	4
Minimize Operating and Capital Costs	N/A	N/A	N/A	N/A	N/A	N/A
Maximize Compatibility with Existing and Planned Development	3	4	5	5	5	3
Minimize Impacts to Natural Resources	5	5	5	5	5	5
Minimize Impacts to Social and Economic Resources	4	4	4	5	3	3
Minimize Impacts to Cultural Resources	4	5	5	5	5	4
Maximize Avoidance of Areas with Geologic and Soils Constraints	4	4	4	4	4	4
Maximize Avoidance of Areas with Potential Hazardous Materials	5	5	5	5	5	5

1 2 3 4 5

Least Favorable

Most Favorable

Table S.8-1
Los Angeles-to-San Diego-via-Inland Empire Region – High-Speed Train Station Attainment of Objectives

Objective	Downtown Riverside, Metrolink Station	UC Riverside Campus	March ARB, West of I-215	Murrieta, at I-15 and I-215 Interchange	Temecula- Murrieta Border, near Winchester Interchange	Escondido Transit Center
Maximize Ridership/Revenue Potential	3	3	3	1	1	3
Maximize Connectivity and Accessibility	5	3	2	3	1	4
Minimize Operating and Capital Costs	N/A	N/A	N/A	N/A	N/A	N/A
Maximize Compatibility with Existing and Planned Development	4	3	4	5	5	4
Minimize Impacts to Natural Resources	5	5	5	4	4	5
Minimize Impacts to Social and Economic Resources	3	4	4	4	4	4
Minimize Impacts to Cultural Resources	4	5	5	5	5	5
Maximize Avoidance of Areas with Geologic and Soils Constraints	4	4	4	4	4	4
Maximize Avoidance of Areas with Potential Hazardous Materials	5	5	5	5	5	5

1 2 3 4 5

Least Favorable

Most Favorable

Table S.8-1
Los Angeles-to-San Diego-via-Inland Empire Region – High-Speed Train Station Attainment of Objectives

Objective	Escondido at the SR 78 and I-15 Interchange	Mira Mesa	Kearny Mesa near Montgomery Field	Qualcomm Stadium
Maximize Ridership/Revenue Potential	3	2	3	3
Maximize Connectivity and Accessibility	4	3	4	4
Minimize Operating and Capital Costs	N/A	N/A	N/A	N/A
Maximize Compatibility with Existing and Planned Development	4	3	5	5
Minimize Impacts to Natural Resources	5	4	5	4
Minimize Impacts to Social and Economic Resources	5	5	5	5
Minimize Impacts to Cultural Resources	5	5	5	5
Maximize Avoidance of Areas with Geologic and Soils Constraints	4	4	4	4
Maximize Avoidance of Areas with Potential Hazardous Materials	5	5	5	5

1 2 3 4 5

Least Favorable

Most Favorable